IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

ANTHONY J. KINNEY ET AL.

CASE NO.: BB1538USNA APPLICATION NO.: 10/776311

CONFIRMATION NO.: 4023 GROUP ART UNIT: 1638

EXAMINER: DAVID T. FOX FILED: FEBRUARY 11, 2004

FOR: PRODUCTION OF VERY LONG CHAIN POLYUNSATURATED FATTY ACIDS

IN OIL SEED PLANTS

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Via EFS-Web

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is submitted in response to the Notification of Non-Compliant Appeal Brief mailed on March 18, 2009. It is respectfully requested that Sections III and V and the Claims Appendix be replaced with the following:

(III) Status of Claims

Claims 1-139 were originally filed. Claims 140 and 141 were added during prosecution.

A Restriction Requirement was issued and the subject matter of Group I, Claims 1, 11, 12, 16-18 and 26-28 were elected for further prosecution. Claims 2-11, 13-15, 17-20, 27-139 and 141 were cancelled during prosecution. Claims 21-25 and 140 were withdrawn from prosecution but not cancelled at the time of this Appeal. There is one independent claim: 1.

The currently pending and appealed claims are claims 1, 12, 16 and 26 which are set forth in the Claims Appendix.

(V) Summary of Claimed Subject Matter

The invention on appeal is believed to constitute pioneering work wherein an exogenous DHA and/or EPA biosynthetic pathway was incorporated into an oilseed plant thereby enabling the oilseed plant to produce, for the first time, at least 1% DHA and/or EPA in the seed oil. This simply was not known prior to Applicants' disclosure.

Claim 1 concerns a transgenic oilseed plant that produces mature seeds in which the total seed fatty acid profile comprises at least 1.0% of at least one omega -3 polyunsaturated fatty acid having at least twenty carbon atoms and five or more carbon-carbon double bonds wherein said transgenic oilseed plant comprises in its genome at least two transgenic nucleic acid sequences encoding at least two different polypeptides and further wherein at least one polypeptide has desaturase activity and at least one polypeptide has elongase activity.

This is discussed in the specification, *inter alia*, on page 17 starting at line 3 through line 2 on page 19, Examples 3-8 and 10-13, and claims 1, 11 and 12 as originally filed.

Claim 12 concerns the oilseed plant of claim 1 wherein the polyunsaturated fatty acid is an omega-3 fatty acid selected from the group consisting of eicosapentaenoic acid (EPA), docosapentaenoic acid (DPA), and docosahexaenoic acid (DHA).

This is discussed in the specification, *inter alia*, on page 4 at lines 17-18, on page 17 starting at line 37 through line 2 on page 18, and Examples11 and 13 and in claim 12 as originally filed.

Claim 16 concerns seeds obtained from the transgenic plant of claim 1 or 12 wherein the seed comprises the transgenes.

This is discussed in the specification, *inter alia*, on page 4 at lines 3-8, pages 24 and 25, and Examples 4 and 5.

Claim 26 relates to the transgenic oilseed plant of claim 1 or 12 being selected from the group consisting of soybean, Brassica species, sunflower, maize, cotton, flax, and safflower.

This is discussed in the specification on page 17 at lines 35-36 and in claim 26 as originally filed.

Remarks

Submitted herewith are replacement pages for Sections III and V. It is believed that these replacement pages address the defects raised in the Notification of Non-compliant Appeal Brief mailed on March 18, 2009. Specifically, Section III now recites the status of all the claims and Section V now has the correct heading.

Please charge any fees or credit any overpayment associated with the filing of this Response including, but not limited to any Extension of Time, to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

/Lynne M. Christenbury/

LYNNE M. CHRISTENBURY
ATTORNEY FOR APPLICANTS
Registration No.: 30,971

Telephone: (302) 992-5481 Facsimile: (302) 892-1026

Dated: March 19, 2009